

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT
(Under 37 CFR 1.97(b) or 1.97(c))

Docket No.
17418

In Re Application Of: **Antonio Ferrante, et al.**

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
10/588,094	July 28, 2006	Unassigned	23389	Unassigned	Unassigned

Title:

THERAPEUTIC AND CARRIER MOLECULES

Address to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
37 CFR 1.97(b)

1. ☒ The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.

37 CFR 1.97(c)

2. ☐ The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:

☐ the statement specified in 37 CFR 1.97(e);

OR
☐ the fee set forth in 37 CFR 1.17(p).

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT
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17418

In Re Application of: **Antonio Ferrante, et al.**

Application No. 10/588,094	Filing Date July 28, 2006	Examiner Unassigned	Customer No. 23389	Group Art Unit Unassigned	Confirmation No. Unassigned
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Title:

THERAPEUTIC AND CARRIER MOLECULES

Payment of Fee

(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))

- ☐ A check in the amount of _____ is attached.
- ☒ The Director is hereby authorized to charge and credit Deposit Account No. 19-1013/SSMP as described below.
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Xiaochun Zhu

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Signature

Dated: **October 30, 2006**

Xiaochun Zhu
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CC:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Antonio Ferrante, et al.

Examiner: Unassigned

Serial No.: 10/588,094

Art Unit: Unassigned

Filed: July 28, 2006

Docket: 17418

For: THERAPEUTIC AND
CARRIER MOLECULES

Dated: October 30, 2006

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Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with 37 C.F.R §§1.97 and 1.98, it is requested that the following references, which are also listed on the attached Form PTO-1449, be made of record in the above-identified case.

1. PCT International Publication No. WO 96/11908, published April 25, 1996;
2. PCT International Publication No. WO 96/13507, published May 9, 1996;
3. PCT International Publication No. WO 97/38688, published October 23, 1997;
4. PCT International Publication No. WO 01/21172 A1, published March 29, 2001;
5. PCT International Publication No. WO 01/21575 A1, published March 29, 2001;
6. PCT International Publication No. WO 90/08130, published July 26, 1990;

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dated: October 30, 2006


Xiaochun Zhu

7. PCT International Publication No. WO 02/094764 A1, published November 28, 2002;
8. PCT International Publication No. WO 03/007876 A2, published January 30, 2003;
9. PCT International Publication No. WO 03/006007 A1, published January 23, 2003;
10. Australian Patent Publication No. 200022459 A1, published October 19, 2000;
11. United States Patent No. 5,151,534, dated September 29, 1992 to Shroot et al.;
12. PCT International Publication No. WO 99/58122, published November 18, 1999;
13. PCT International Publication No. WO 99/58121, published November 18, 1999;
14. PCT International Publication No. WO 99/58123, published November 18, 1999;
15. PCT International Publication No. WO 02/43728 A1, published June 6, 2002;
16. PCT International Publication No. WO 97/03663, published February 6, 1997;
17. European Patent Publication No. 0 345 038, published December 6, 1989;
18. PCT International Publication No. WO 99/58120, published November 18, 1999;
19. Bjorndal B. et al., "Nuclear Import of Factors Involved in Signaling is Inhibited in C3H/10T1/2 Cells Treated With Tetradecylthioacetic Acid", *Journal of Lipid Research* 43:1630-1640 (2002);
20. PCT International Publication No. WO 01/68582 A1, published September 20, 2001;
21. Robinson B.S. et al., "Inhibition of Neutrophil Leukotriene B₄ Production by a Novel Synthetic N-3 Polyunsaturated Fatty Acid Analogue, β -Oxa 21:3n-3¹", *The Journal of Immunology* 171(9):4773-4779 (2003);

22. Costabile M. et al., "A Novel Long Chain Polyunsaturated Fatty Acid, β -Oxa 21:3n-3, Inhibits T Lymphocyte Proliferation, Cytokine Production, Delayed-Type Hypersensitivity, and Carrageenan-Induced Paw Reaction and Selectively Targets Intracellular Signals", *J. Immunol.* 167(7):3980-3987 (2001);
23. Ferrante A. et al., "Neutrophil Migration Inhibitory Properties of Polyunsaturated Fatty Acids. The Role of Fatty Acid Structure, Metabolism, and Possible Second Messenger Systems", *J. Clin. Invest.* 93:1063-1070 (1994);
24. Forman B.M. et al., "Hypolipidemic Drugs, Polyunsaturated Fatty Acids, and Eicosanoids are Ligands for Peroxisome Proliferator-Activated Receptors α and δ ", *Proc. Natl. Acad. Sci. USA* 94:4312-4317 (1997);
25. Huang Z.H. et al., " n -6 and n -3 Polyunsaturated Fatty Acids Stimulate Translocation of Protein Kinase $C\alpha$, $-\beta 1$, $-\beta 11$ and $-\epsilon$ and Enhance Agonist-Induced NADPH Oxidase in Macrophages", *Biochem. J.* 325:553-557 (1997);
26. Novak T.E. et al., "NF- κ B Inhibition by ω -3 Fatty Acids Modulates LPS-Stimulated Macrophage TNF- α Transcription", *Am. J. Physiol. Lung Cell Mol. Physiol.* 284:L84-L89 (2003);
27. Denys A. et al., "Eicosapentaenoic Acid and Docosahexaenoic Acid Modulate MAP Kinase (ERK1/ERK2) Signaling in Human T Cells", *Journal of Lipid Research* 42:2015-2020 (2001);
28. Narayanan B.A. et al., "Modulation of Inducible Nitric Oxide Synthase and Related Proinflammatory Genes by the Omega-3 Fatty Acid Docosahexaenoic Acid in Human Colon Cancer Cells", *Cancer Research* 63:972-979 (2003);
29. Zeyda M. et al., "Suppression of T Cell Signaling by Polyunsaturated Fatty Acids: Selectivity in Inhibition of Mitogen-Activated Protein Kinase and Nuclear Factor Activation", *The Journal of Immunology* 170:6033-6039 (2003);
30. Ferrante J.V. et al., "Altered Responses of Human Macrophages to Lipopolysaccharide by Hydroperoxy Eicosatetraenoic Acid, Hydroxy Eicosatetraenoic Acid, and Arachidonic Acid. Inhibition of Tumor Necrosis Factor Production", *J. Clin. Invest.* 99(6):1445-1452 (1997);
31. Aukrust P. et al., "Immunomodulating Effects of 3-Thia Fatty Acids in Activated Peripheral Blood Mononuclear Cells", *European Journal of Clinical Investigation* 33(5):426-433 (2003);

32. Huang S.M. et al., "Identification of a New Class of Molecules, the Arachidonyl Amino Acids, and Characterization of One Member that Inhibits Pain", *The Journal of Biological Chemistry* 276(46):42639-42644 (2001);
33. Prusakiewicz J.J. et al., "Selective Oxygenation of *N*-Arachidonylglycine by Cyclooxygenase-2", *Biochemical and Biophysical Research Communications* 296(3):612-617 (2002);
34. Devadas B. et al., "Substrate Specificity of *Saccharomyces Cerevisiae* Myristoyl-CoA:Protein *N*-Myristoyltransferase", *The Journal of Biological Chemistry* 267(11):7224-7239 (1992);
35. Trofimov B.A. et al., "Search for Nonsteroidal Anti-Inflammatory Drugs by Using β -Thiopropionic Acid Derivatives", *Khimico-Farmatsevticheskii Zhurnal* 23(12):1463-1465 (1989);
36. Langner C.A. et al., "4-Oxatetradecanoic Acid is Fungicidal for *Cryptococcus Neoformans* and Inhibits Replication of Human Immunodeficiency Virus I", *The Journal of Biological Chemistry* 267(24):17159-17169 (1992); and
37. Kanao S. et al., "Syntheses of Aminoacid Derivatives and Their Biological Activities. I. Anti-Influenza Activity", *Yagukaku Zasshi* 95(4):397-401 (1975).

The references were cited in an International Search Report dated April 15, 2005 received from the Australian Patent Office. Applicants are submitting copies of Reference nos. 1-10 and 12-37. In accordance with the waiver of 37 C.F.R. 1.98 (a)(2)(i) in effect as of June 30, 2003, Applicants are not required to submit a copy of the above cited U.S. Patent reference. Applicants previously submitted a copy of the International Search Report on July 28, 2006. The relevance of the above-identified references has been described in the International Search Report.

Inasmuch as this Information Disclosure Statement is being submitted in accordance with the schedule set out in 37 C.F.R. § 1.97(b), no statement or fee is required.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Xiaochun Zhu', written in a cursive style.

Xiaochun Zhu
Registration No. 56,311

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XZ:dg

Form PTO-1449
(REV. 7-80)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE**LIST OF PRIOR ART
CITED BY APPLICANT**
(Use several sheets if necessary)

Atty. Docket No. (Optional)

17418

Application Number

10/588,094

Applicant(s)

Antonio Ferrante, et al.

Filing Date

July 28, 2006

Group Art Unit

Unassigned

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		5,151,534		Shroot et al.			

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
		WO 96/11908	4/25/96	PCT			✓	
		WO 96/13507	5/9/96	PCT			✓	
		WO 97/38688	10/23/97	PCT			✓	
		WO 01/21172 A1	3/29/01	PCT			✓	
		WO 01/21575 A1	3/29/01	PCT			✓	
		WO 90/08130	7/26/90	PCT			✓	
		WO 02/094764 A1	11/28/02	PCT			✓	
		WO 03/007876 A2	1/30/03	PCT			✓	
		WO 03/006007 A1	1/23/03	PCT			✓	
		200022459 A1	10/19/00	Australia			✓	
		WO 99/58122	11/18/99	PCT			✓	
		WO 99/58121	11/18/99	PCT			✓	
		WO 99/58123	11/18/99	PCT			✓	
		WO 02/43728 A1	6/6/02	PCT			✓	
		WO 97/03663	2/6/97	PCT			✓	
		0 345 038	12/6/89	Europe			✓	
		WO 99/58120	11/18/99	PCT			✓	
		WO 01/68582 A1	9/20/01	PCT			✓	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Bjorndal B. et al., "Nuclear Import of Factors Involved in Signaling is Inhibited in C3H/10T1/2 Cells Treated With Tetradecylthioacetic Acid", <i>Journal of Lipid Research</i> 43:1630-1640 (2002)
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EXAMINER

DATE CONSIDERED

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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